



Revision Number:

Purchasing Agent: Terri O'Toole

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Item: Road Salt (Type A) FOB Plant Pick-Up (Lake Point, Utah)

Vendor: 29374F - B
(Ordering Address)

Broken Arrow
8960 North Highway 40
Lake Point UT 84074

Internet Homepage:

brokenarrowusa.com

General Contact:

Jared S. Bunn

Telephone:

(435)882-3942

Fax:

(435)882-6911

Email:

jbunn@brokenarrowusa.com

Reporting Type:

Line Item

Brand/Trade Name:

Price:

See attached

Terms:

Effective Dates:

09/16/05 through 09/15/07

Remaining one-year renewal options:

None

Days Required for Delivery:

Price Guarantee Period:

1 year

Minimum Order:

Min. Shipment w/o Charges:

See attached freight charges

Other Conditions:

This is a new contract.

Remittance Address: (Vendor # 29374F) P O Box 580
Tooele UT 84074

This contract resulted from Bid# RF6002.

This contract covers only those items listed in the price schedule. It is the responsibility of the agency to ensure that other items purchased are invoiced separately. State agencies will place orders directly with the vendor



(creating a PG in Finet) and make payments for the same on a PV referencing the original PG. Agencies will return to the vendor any invoice which reflects incorrect pricing.

Multitple awards have been issued. See the list of contracts, listed below, before making a purchase decision.

COMPANY NAME	CONTRACT NUMBER	SALT (TYPE)	PLANT LOCATION
Redmond Minerals	MA831	A,B,C, & D	Redmond Utah
North American Salt Company	MA1721	C	Little Mountain, Utah
Morton Salt	MA1722	B and C	West Grantsville, Utah

Road Salt, Type A: \$10.00/ton

Freight Charges:

.15 cents per US ton/mile

SPECIFICATIONS DEICING SALT

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Sodium chloride highway deicing material.

1.2 PAYMENT PROCEDURES

- A. Pay for accepted quantities at unit price per ton.

1.3 REFERENCES

- A. APHA-AWWA-WEF: Standard Methods for the Examination of Water and Waste Water.
- B. ASTM B117: Standard Practice for Operating Salt Spray (Fog) Apparatus.
- C. ASTM C136: Method of Sieve Analysis of Fine and Coarse Aggregates.
- D. ASTM D632: Standard Specification for Sodium Chloride.
- E. ASTM D1193: Standard Specification for Reagent Water.



- F. ASTM D1411: Standard Test Method for Water-Soluble Chlorides Present as Admixes in Graded Aggregate Road Mixes.
- G. ASTM E534: Standard Test Methods for Chemical Analysis of Sodium Chloride.
- H. SHRP H-205: Evaluation Procedures for Deicing Chemicals.

1.4 SUBMITTALS

- A. For each shipment, supply bill of lading showing:
 - 1. Type and grade of material
 - 2. Type and amount of additives
 - 3. Destination
 - 4. Consignee's name
 - 5. Date of Shipment
 - 6. Truck identification
 - 7. Net weight in English units
 - 8. Bill of Lading number
 - 9. Manufacturer

1.5 DELIVERY, STORAGE AND HANDLING

- A. Contamination: Do not supply shipments contaminated with other materials.

1.6 QUALITY ASSURANCE

- A. Sampling, supplier-delivered material:
 - 1. Deliver to specified site.
 - 2. Notify ENGINEER when delivery is complete.
 - 3. Sample by random one sample for each delivery site (minimum sample size 10 lbs).
 - 4. Store sample in airtight 3-1/2 gallon plastic container.
- B. Sampling, F.O.B. plant material:
 - 1. Sample by random one sample for each suppliers stockpile used (minimum sample size 10 lbs).
 - 2. Store sample in airtight 3-1/2 gallon plastic container.
- C. Compliance: Supplier is liable for all UDOT testing costs of non-complying materials.
- D. Price Adjustment, Gradation: Downward 25% price adjustment assessed for materials outside specified gradation.



- E. Price Adjustment, Moisture Content: Downward 25% price adjustment assessed for moisture content greater than specified.
- F. Price Adjustment, General: Products, failing to meet any other specification requirements, are assessed 50% price adjustment or total rejection. Supplier replaces rejected material plus any contaminated material at their cost. Rejected product is removed by the supplier and replaced with compliant product, including handling and transportation charges at no additional cost. Removal means removing all material contaminated by the non-specification material. ENGINEER establishes the amount of material contaminated.

Two non-compliant shipments per contract year may result in contract termination.

PART 2 PRODUCTS

2.1 DEICING SALT

- A. General:
1. Moisture Content: Maximum 3.0% by weight using ASTM D1411.
 2. Melting Activity: Active at 5°F ambient temperature. Supplier certifies material meets SHRP H-205.1 for effectiveness.
 3. Gradation: Meets the following gradation using ASTM C136:

<u>Sieve Size</u>	<u>Percent Passing</u>
1/2"	100
3/8"	90-100
# 4	75-100
# 8	40-80
# 16	15-45
# 50	0-10

4. Chemical Constituents:
 - a. Do not supply products containing constituents exceeding total concentration limits listed in 2.1.A.4.b. Test according to methodology listed below. Measure base product concentration levels prior to anti-freeze or chemical adulterant addition.
 - b. Chemical contaminant limit stated as parts per million (ppm).

Chemical	Concentration (ppm)
Phosphorus	25.00
Arsenic	5.00
Copper	0.20



Lead	1.00
Mercury	0.05
Cadmium	0.20
Barium	10.00
Selenium	5.00
Zinc	10.00

c. Chemical constituent test methods:

- 1) Total phosphorus as described in "Standard Methods for the Examination of Water and Waste Water", APHA-AWWA-WEF. Total phosphorus shall be determined upon a 1% test solution. The Total Phosphorus value determined from the 1% solution is the value to be reported without being calculated for the dilution. The test solution should be prepared by placing 10 ml of sample into 500 ml of ASTM D1193 Type II distilled water contained in a 1 L volumetric flask to which 2.5 ml 1 + 1 sulfuric acid has been added. Swirl the contents and make up to 1000 ml with distilled water.
- 2) Total cyanide as described in "Standard Methods for the Examination of Water and Waste Water", APHA-AWWA-WEF.
- 3) Total arsenic, barium, cadmium, chromium, copper, lead, selenium and zinc: Atomic Absorption Spectrophotometry or Plasma Emission Spectroscopy as described in "Standard Methods for the Examination of Water and Waste Water", APHA-AWWA-WEF.
- 4) Total mercury: Cold Vapor Atomic Absorption Spectrophotometry as described in "Standard Methods for the Examination of Water and Waste Water", APHA-AWWA-WEF.

B. Class A Sodium Chloride, Untreated: Minimum 92.0% NaCl by weight using ASTM D1411.

1. Melting power exceeds bakers grade salt by 100% total volume melt using SHRP H-205.1 at 5°F.
2. Melting power exceeds bakers grade salt by 50% total volume melt using SHRP H-205.1 at 25°F.
3. Ice penetration exceeds baker's grade sodium chloride by 60% in one hour using SHRP H-205.5 at 20°F.



4. Corrosiveness is 50% less corrosive than bakers grade sodium chloride measured using ASTM B117.
5. Color is discernibly dark, distributed homogeneously throughout entire granule, non-fading, and non-leaching.

FINET COMMODITY CODE(S):for agency use only

77545000000-ROAD MAINTENANCE SALT

90634000000-FREIGHT HANDLING; MATERIALS HANDLING